METHOD AND APPARATUS FOR PREVENTION OF READ CORRUPTION
IN ROTATED-READ REGISTER FILES AND CONTENT ADDRESSABLE
MEMORY ARRAYS

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ABSTRACT OF THE DISCLOSURE

Rotated-read register file and CAM array memory structures include corruption prevention circuits that are used to force a read bit line to a known digital value when a cell structure is being written to at the same time a read is performed on the corresponding read word line. Consequently, according to the present invention, the value on the read bit line is forced to a known digital value by the corruption prevention circuit of the invention and the prior art problem of the value being read having an unknown or indeterminate value that is neither a digital low nor a digital high is eliminated. Therefore, using the method and structure of the invention, indeterminate values are never propagated down stream to the sensing elements, logic elements, or other downstream circuitry of the system and there is no potential failure of the downstream circuitry.